I CLAIM:

1. A cutting tool comprising:

a body comprising sintered cemented carbide, cermet or ceramic; and

a hard and wear resistant coating on at least functional parts of the body, said coating comprising a structure of one or more refractory layers of which at least one layer comprises an alumina layer having a thickness of 0.5-25 μm, and consisting essentially of single phase α-alumina textured in the [300]-direction with a texture coefficient larger than 1.5, the texture coefficient being defined as:

$$TC(hkl) = \frac{I(hkl)}{I_0(hkl)} \left\{ \frac{1}{n} \sum \frac{I(hkl)}{I_0(hkl)} \right\}^{-1}$$

where

I(hkl) = measured intensity of the (hkl) reflection,

Io(hkl) = standard intensity of the ASTM standard,

powder pattern diffraction data, card number 43-1484,

n = number of reflections used in the calculation

(hkl) reflections used are: (012), (104), (110),

(113), (024), (116) and (300).

2. The cutting tool according to claim 1, wherein the alumina layer has a thickness of 1-10 μm.

3. The cutting tool according to claim 1, wherein the texture coefficient is larger than 3.

4. The cutting tool according to claim 1, wherein the texture coefficient is larger than 5.

5. The cutting tool according to claim 1, wherein the α-alumina layer contains 0.01-10 percent by weight of residues of a texture modifying agent.

6. The cutting tool according to claim 5, wherein the α-alumina layer contains 0.01-5 percent by weight of residues of a texture modifying agent.

7. The cutting tool according to claim 5, wherein the α-alumina layer contains less than 1 percent by weight of residues of a texture modifying agent.

8. The cutting tool according to claim 1, further comprising at least one layer having a thickness of 0.1-10 μm, comprising a nitride, carbide, carbonitride, oxycarbide and/or oxycarbonitride of the metal titanium ($TiC_xN_yO_z$)and that said layer is in contact with the α-alumina layer.

9. The cutting tool according to claim 8, wherein the at least one layer has a thickness of 0.5-5 μm.

10. The cutting tool according to claim 8, wherein the outer layer is α-alumina.

11. The cutting tool according to claim 1, wherein the outer layer is TiN.

12. The cutting tool according to claim 1, the surface of the coated cutting tool is smoothened by means of a brushing operation.

13. A method of producing a coated cutting tool comprising at least one layer of textured α-alumina, the method comprising:

introducing a tool surface to be coated into a reactive atmosphere comprising H_2 and/or Ar;

providing the reactive atmosphere with a concentration of oxidizing species below 5 ppm;

initiating nucleation of the α-alumina layer on the surface by first introducing HC1 and CO_2 gasses into the atmosphere, than introducing $AlCl_3$ gas into the atmosphere;

maintaining a temperature of 950-1050°C during nucleation of the α-alumina layer; and

introducing a catalyst and a texture modifying agent into the atmosphere during growth of the α-alumina layer.

14. The method according to claim 13, wherein the oxidizing species comprises water vapor, the catalyst comprises H_2S, and the texture modifying agent comprises $ZrCl_4$.

15. The method according to claim 13, wherein 0.05-10 percent by volume of the texture modifying agent is introduced.

16. The method according to claim 13, wherein 0.2-5 percent by volume of the texture modifying agent is introduced.

17. The method according to claim 13, wherein 0.5-2 percent by volume of the texture modifying agent is introduced.

18. A method according to claim 14, wherein the addition of the texture modifying agent to the reaction gas mixture is 0.05-10 percent by volume of the total reaction gas mixture.

19. The method according to claim 18, wherein the addition of the texture modifying agent is 0.2-5 percent by volume of the total reaction gas mixture.

20. The method according to claim 18, wherein the addition of the texture modifying agent is 0.5-2 percent by volume of the total reaction gas mixture.